

# Index

## A

abstraction 55, 60, 81, 87, 143, 151, 239, 327  
 academic ambience 127, 131-133  
 affective commitment 193, 195, 200-202, 204-209, 211-212  
 aging people 31-33, 36-42, 44-49, 51-52  
 alternative management models 193  
 application programming interfaces (API) 62, 67, 73, 291, 318, 327, 329, 331  
 assignment network 97, 105-106, 109

## B

bioinformatics 300-302, 304-305, 309, 311-313  
 Biological Problem Solving Environments (PSEs) 300-301  
 BioMoby database 305-306  
 business functions 83-86  
 business model 19, 27, 65, 144, 181, 228-231, 234-235, 262, 317, 330  
 business plans 281-282  
 business processes 19, 33, 54-56, 62, 68, 73, 80, 83-85, 111, 143, 145-146, 148, 155-157, 159, 224, 228, 337, 341  
 Business Process Execution Language (BPEL) 300-301, 305-311  
 Business Process Management (BPM) 55, 68, 93-94, 110  
 buyer-seller-relationship 16, 18-19, 25, 27

## C

call centres 193-197, 200-201, 206-207, 209-210, 212  
 Call-For-Implementation (CFI) 1-4, 6-7, 9, 12-14, 168, 170, 172  
 capabilities network 97, 104-105  
 coding 2-3

collaboration 3, 49, 68, 73, 81, 104, 108, 237-239, 243-244, 255, 266, 269, 300-302, 307-309, 313, 319, 335-336, 338, 341  
 communication network 97, 105-106  
 community-based software development 1-2, 4, 9, 13  
 community developers 2-4, 6, 12  
 competitive advantage 16, 94, 110, 192, 246  
 composability 239-240  
 Computation Independent Model (CIM) 86, 143-144, 151, 156  
 Confirmatory Factor Analysis (CFA) 168-169  
 cost efficiency 26, 54, 284, 286-287, 295  
 course management system 69  
 crisis management 282, 297, 335, 341, 344  
 critical function prototype 262  
 customer behavior 247  
 customer contact 181, 183-186, 188, 190-191, 208  
 customer-driven innovation 246  
 customer integration 245-248  
 customer interaction 16, 20, 22, 27  
 customer involvement 31, 35, 50, 52  
 customer requirements 24, 249, 255, 262  
 customer solution 16-17, 21, 23, 25-27, 29  
 customization 17-18, 25, 160, 163-164, 170, 172-175  
 cybernetics 159, 213-214, 225

## D

darkhorse prototype 262, 268  
 decision support systems (DSS) 55-58, 60-61, 74  
 deliverables 32, 180-181, 183-186, 188-190  
 design science 89, 108, 111, 235, 256-257, 272, 281, 283, 293, 295-296, 298, 337, 342  
 design thinking coaching method 258  
 discoverability 239-240  
 Dynamic Network Analysis (DNA) 92, 95-97, 101, 103, 109-110, 118

## E

e3-value ontology 229  
 e-biology 301, 312  
 educational institutes 123  
 e-learning 54-55, 60, 62-63, 66-71, 73-75  
 emergency management 281-290, 295-296, 298  
 emergency strategies 281  
 end user 11, 20, 32-33, 49, 52, 79, 89, 210, 265, 275, 285, 290, 332  
 energy efficiency 273-277  
 energy-efficient city 273-274, 277, 279  
 energy-related optimizations 273  
 energy sphere 275-276  
 entertainment value 160, 168, 170, 172-175  
 environmental impact 274  
 e-purchase intent 160  
 e-retail 160-163, 165-168, 170, 172-175, 177  
 e-satisfaction 160-167, 170, 172-175, 178  
 e-service quality 160-167, 174, 176-179  
 e-shopping 160-161, 164-168, 172-173, 175  
 event management 290, 335  
 Exploratory Factor Analysis (EFA) 168

## F

Factor Analysis 123-124, 127, 133, 140, 168  
 final prototype 263  
 financial aspects 130-133, 229-230  
 functional prototype 262

## G

global competition 16, 243  
 graphical user interface (GUI) 306, 310, 319, 322, 338

## H

human development 180-181, 183-186, 188-190  
 human resources 1-2, 66, 74, 130-132, 196, 206, 238

## I

idea generation 32, 34, 36-42, 44-49, 238, 241, 261-262, 276-277  
 ideation 32-33, 35-36, 46, 48-52, 269  
 identity management 316-317, 325-326, 329  
 Incident Management Systems 142  
 individualization 33  
 information and cooperation portal 335-337, 341-342

Information Technology Service Management (ITSM) 77, 79-80, 88, 92-94, 97-98, 101, 109, 118, 142-146, 148-149, 155-156  
 infrastructure facilities 127, 131-133  
 innovation cycle 246  
 innovation lab 237-238, 266, 268  
 innovation management 50, 52, 237-241, 243, 245, 247-249, 252-254, 257, 269, 271  
 innovation network 39, 51, 237-242  
 innovation process 35, 245-246, 248  
 innovative environments 267  
 integrated prototype 262  
 Integrated Service Engineering (ISE) 228-230, 234-235  
 Internet of Services 228-229, 235  
 interoperability 18, 54-55, 63-65, 70, 74, 148, 158, 285-286, 290, 312, 316  
 IT-based service innovations 255  
 IT-enabled services 253, 273-274, 277, 279  
 IT management 77, 80, 82, 85  
 IT Service Engineering and Management Framework (ITS-EMF) 76-77, 83, 85, 87-88  
 IT System Engineering (ITSE) 76-78, 80-81, 83-85, 87-88

## K

Knowledge Exclusivity Index (KEI) 103-105  
 knowledge network 97, 103-104, 109  
 knowledge requirement network 97, 107, 109

## L

lead-users 245  
 lean thinking 193, 195, 197-201, 203-207, 210  
 learning process 74, 246  
 local search bias 246  
 loose coupling 239-240

## M

managing service innovation 255, 257  
 mature organizations 255-258, 270  
 metamodel 147-148, 151, 153  
 method engineering 255-258  
 MoBiFlow 300-301, 305, 310, 312  
 mobile communication networks 281, 283, 285  
 mobile device 58, 162, 284-285, 288, 310, 314-316, 318-319, 324-326, 328, 331  
 mobile health and fitness applications 314  
 mobile running applications 315-316, 318

## Index

mobile service 36, 283-284, 287-288, 290-291, 298-299, 314-319, 321, 328, 330-331, 341  
mobile value-adding services 281, 288, 295  
Model Driven Architecture (MDA) 85-87, 143-144, 156, 158  
Model-Driven Engineering (MDE) 142-143, 147-148, 156  
molecular biology 300-301, 310

## N

natural disasters 281-282, 298  
natural resources 273

## O

ontologies 146-148, 155-157, 159, 328-329, 334  
Ontology Engineering (OE) 142, 146-148, 156  
open innovation 38, 49, 237-238, 243, 245-248, 252-253, 268  
Open Knowledge Initiative (OKI) 66-67, 73-74  
Open Service Interface Definitions (OSID) 67  
organisation aspects 127, 131

## P

panel analysis 180, 186-191  
Platform Independent Model (PIM) 86, 143  
Platform Specific Model (PSM) 86, 143-144, 223  
process improvement 180-181, 183-186, 188-190, 311  
programmers 6-7  
project environment 266  
project leader 267  
project management 6, 14, 16, 24, 26-27, 30, 180-181, 183-186, 188-191, 203, 269-270  
project manager (PM) 6, 9-13, 186, 188-191  
public authorities 335-336, 338, 340-341  
public event 281, 283, 289-290, 298, 335-337, 341-342

## Q

quality assurance 68, 71, 79, 135-141, 180-181, 183-186, 188-190, 206  
quality indicator model 1, 5, 13

## R

reference architecture 281, 283, 286-287, 289-290, 295  
relational process 16, 20-22, 29  
relationship chains 107  
renewable energy 273  
research and development 15, 57, 140, 180-181, 184-185, 194, 237, 241  
revenue sharing 317, 330

## S

scientific analyses 302  
security responsibilities 335-336, 340-341  
selling solutions 16, 18-19, 21-22, 25-26  
service architect 230, 234  
service capabilities 76, 84-85  
service center 245, 247-252  
service concept 31-33, 37-40, 42, 44, 46-47, 77, 83, 228-230, 234  
service delivery 28, 193, 195, 199, 202, 229, 231  
service development 31-34, 36, 38, 47-50, 52, 230, 253, 256, 270-271, 276, 279  
Service-Dominant (SD) logic 168, 172, 214  
service industry 29, 176, 178, 181, 209-211, 253, 255-256  
service innovation 31, 34, 47, 52, 210, 255, 257-258, 263, 269  
service operations 92, 97, 103-104, 107-108, 111, 193-195, 197-199, 201, 203, 206-208  
service orientation 90, 237, 239  
service-oriented-applications 55  
service oriented-approach 55  
service oriented architecture 55, 59, 61, 239  
Service-Oriented Computing (SOC) 54, 72  
Service-oriented IT System (SoITS) 85, 87  
service oriented modeling 55  
service performance 83, 193  
service portfolio 148-149  
service provider 3, 5-6, 34, 56, 68, 83, 109, 145, 148, 163, 177, 209, 229, 240, 242-243, 275, 286-289, 299, 317-318  
service quality evaluation 1-2, 5-6, 12-13  
servicescape 162-163, 173-176  
service science 15, 30-32, 49, 53, 75, 77, 91, 122, 141, 157, 159, 179-180, 184, 188-189, 191-192, 210, 212, 214, 216, 223-227, 235-236, 244, 252, 254, 256, 272, 274, 279-280, 299, 313, 331, 334, 344

service sector 2, 82, 90, 124, 196, 228, 246  
 service systems 5, 76, 79, 82-83, 88, 90, 213-214,  
 216, 219-220, 224-227, 276  
 service users 33, 38, 40, 42  
 Situated Decision Support System (SDSS) 56-58  
 situated service oriented model (SSOM) 55, 58, 60-  
 62, 67-68, 70-71, 73-74  
 social research 180  
 socio-technical networks 273  
 Software as a Service (SaaS) 228, 235  
 software engineering excellence (SEE) 180-186,  
 188-191  
 Software Engineering (SE) 143  
 software outsourcing service 1-2, 6-7, 10-12  
 standardized contract 239  
 sticky information 246  
 Stimulus-Organism-Response (S-O-R) model 162-  
 163, 173-175  
 strategic/market-oriented perspective 234  
 super prosumer 314-316, 318, 330  
 Systemic Enterprise Architecture Method (SEAM)  
 213, 215, 219-221, 223-225, 227  
 Systems Methodology 88, 213-214, 226  
 Systems Philosophy 213-214  
 Systems Theory 213-214, 225, 280

**T**

target customers 230-231  
 team configuration 267  
 Total Quality Management (TQM) 123-125, 127-  
 128, 130-133, 135-141  
 tourism 224, 226, 281-283, 286-289, 295-299

**U**

universe of discourse (UoD) 214-215, 223  
 urban transport system 335  
 user-driven innovation 31, 33-34, 36, 40, 49, 53  
 user-generated mobile services 314, 318, 328, 331

**V**

value creation 16-17, 20-28, 53, 93, 193-194, 199,  
 241, 275-276  
 Value For Money (VFM) 202  
 VeRSiert 289, 297, 335-344  
 viable service systems 213, 224-226  
 viable systems model (VSM) 213, 215-218, 224,  
 226

**W**

Web 2.0 300-301, 310, 312, 316  
 web-based problem solving environments 300  
 website aesthetics 163, 165, 168, 170  
 well-being services 31-33, 40-41  
 work experience 195, 200  
 workflow management systems 146, 301-302, 309-  
 311  
 workflow model 146, 150-151, 155-156, 301, 307-  
 308  
 work productivity 193